

HENRYS LAKE HATCHERY
ANNUAL REPORT

INTRODUCTION

Henrys Lake Hatchery is located in the Island Park area of Fremont County in east-central Idaho. The spawning building was constructed in the 1920s to collect Henrys Lake cutthroat eggs. The hatchery is still used primarily as an egg-taking station and ships eyed eggs of cutthroat Oncorhynchus clarki, rainbow x cutthroat hybrids O. mykiss x O. clarki, and brook trout Salvelinus fontinalis to statewide hatcheries.

HATCHERY IMPROVEMENTS

Major hatchery improvements include the following:

1. Complete reconstruction of the hatchery garage/shop, including insulating and repaneling walls and rebuilding shop tables and storage areas.
2. Complete rebuilding of office, including insulating walls, installation of tongue-and-groove pine boards on the walls, and installation of a suspended ceiling. New lights, storage shelves, sink, and toilet were also installed.
3. Upgrading and repairing of all plumbing in the crew's cabin.
4. Removal of old concrete vats in the incubation room to increase storage areas.
5. Construction of an 8 ft x 24 ft storage shed on the back side of the hatchery building to store yard equipment.
6. Installation of a public restroom in the parking lot.
7. Continuation of cleanup and landscaping of grounds to improve the overall appearance of the facility. Significant improvements included removal of the remaining old fences and various old hatchery items, reseeding most of the lawn areas, grading the parking lot, removal of brush and weeds in the yard areas, and construction of a pole fence on the property line for angler access control.

FISH HEALTH

Brood year pathogen surveys of Temiscamie brook trout and Henrys Lake cutthroat were completed during the 1988-1989 spawning season by personnel from the Eagle Fish Health Lab.

On November 29, 1988, Temiscamie brook trout were inspected for viral pathogens, bacterial pathogens, whirling disease, and Ceratomyxa shasta. All brood fish sampled were negative for disease agents.

Henrys Lake brood fish were inspected on March 17, 1989, and April 25, 1989, for viral pathogens, bacterial kidney disease, enteric redmouth bacterium, bacterial furunculosis, whirling disease, and Ceratomyxa shasta. All brood fish sampled were negative for disease agents.

SPAWNTAKING OPERATION

A total of 89 Temiscamie brook trout were captured in trap nets or ran the fish ladder between October 24 to December 9. Males (n=35) averaged 331 mm (range 264-455) and comprised 39% of the run, while females (n=54) averaged 370 mm (range 260-470) and comprised 61% of the run. A total of 72,200 eggs were collected (Table 1).

In addition, 182 and 112 naturalized brook trout were captured at the fish ladder and Duck Creek, respectively. At the fish ladder, the males (n=75) averaged 309 mm (range 267-392) and comprised 41% of the run, while females (n=107) averaged 344 mm (range 215-515 mm) and comprised 59% of the run. In Duck Creek, males (n=24) averaged 343 mm (range 236-470 mm) and comprised 21% of the run, while females (n=88) averaged 410 mm (range 245-495 mm) and comprised 79% of the run. A total of 172,500 eggs were collected from both sites (Table 1).

From February 27 to May 12, 1989, a total of 9,630 cutthroat and 534 hybrid trout were counted, sorted, and upper caudal-clipped at the spawnhouse on Hatchery Creek. In addition, an estimated 8,000 to 10,000 cutthroats and hybrids were still present at the mouth of Hatchery Creek when spawning was terminated because the egg quota was obtained.

A total of 751 unclipped cutthroat were measured. Males (n=423) averaged 459 mm (range 340-609 mm) and comprised 63% of the run, while females (n=328) averaged 450 mm (range 350-579 mm) and comprised 37% of the run.

In addition, all 870 adipose-clipped cutthroat running the ladder were measured. Males (n=386) averaged 458 mm (range 330-539 mm) and comprised 44% of the adipose-clipped cutthroat, while females (n=484) averaged 455 mm (range 350-550 mm) and comprised 56% of the adipose-clipped cutthroat.

All hybrids entering the spawnhouse were measured and checked for marks. Of the 534 hybrids checked, only 28 had been marked for the sterilization

Table 1. Spawning summary at Henrys Lake Hatchery, 1988-1989.

Species	Green eggs	Eyed eggs	Percent eye-up
Brook (Natural)	172,500	94,600	55
Brook (Temiscamie)	72,200	36,000	50
Cutthroat (C3)	2,646,700	2,201,400	83
cutthroat x Kamloop (C3 x K1) normal	935,100	712,600	76
cutthroat x McConaughy (C3 x R6) normal	412,200	283,300	69
cutthroat x McConaughy (C3 x R6) hormone	206,000	178,800	87
cutthroat x Eagle Lake (C3 x R7) normal	<u>457,400</u>	<u>383,800</u>	<u>84</u>
Totals	4,902,100	3,890,500	79

experiment. Males (n=243) averaged 570 mm (range 360-689), and females (n=269) averaged 539mm (range 400-709 mm).

A total of 2,328 female cutthroat were spawned to produce 2,646,700 cutthroat eggs and 2,010,700 hybrid eggs (Table 1). A total of 130,600 eyed brook trout eggs, 2,201,400 eyed cutthroat eggs, and 1,558,500 eyed hybrid eggs, for a total of 3,890,500 eyed eggs (Table 2), were shipped to Ashton, Mackay, American Falls, and Hagerman Hatcheries for statewide allocations.

PUBLIC RELATIONS

During the past year, an estimated 15,000 visitors came to the hatchery for tours, information, and to fish. Contacts were made throughout the year with the landowners around Henrys Lake to gain further support for department-sponsored habitat improvement projects. Hundreds of man-hours were spent interviewing fisherman on the lake, and about five hundred hours were spent working with the Henrys Lake Foundation and Island Park Sportsmens group on completing more than nine miles of tributary fencing and installation of four fish screens, as well as maintenance of existing fencing and screens.

Contacts with local newspapers included two articles on cutthroat spawning activities, and six articles on habitat improvement projects on the lake's tributaries. In addition, one television interview was done on spawning operations and fencing projects.

Other public relations activities included helping the region put together an information booth on the hatchery and fishery for the Eastern Idaho State Fair.

Public relations activities at the hatchery included expanding the visitor parking area, installation of a public restroom, cleaning up the grounds, setting up a show pond, putting together photographic displays for the office, incubation room, and spawnhouse, and near completion of a visitor pamphlet about the facility.

Work plans for **next year include finishing** the visitor pamphlet, constructing a new entrance sign, as well as visitor information signs, and construction of a visitor information booth in the parking lot.

Table 2. Eyed Eggs shipped from Henry's Lake Hatchery, 1988-1989.

Species/strain	Eyed eggs shipped	Percent goal achieved	Destination	Cost
Brook (natural)	94,600	189	Ashton	\$1,00
Brook (Temisc.)	36,000	30	Ashton	1,000
Subtotal	130,600	77		2,000
Cutthroat (C3)	2,201,400	116	Mackay/Hagerman	8,000
Subtotal	2,201,400	116		8,000
C3 x K1 (normal)	712,600		Mackay/Am. Falls	1,400
C3 x R6 (normal)	283,300		Mackay	500
C3 x R6 (hormone)	178,800		Mackay	1,300
C3 x R7 (normal)	383,800	—	Mackay	600
Subtotal	1,558,500	166		3,800
GRAND TOTAL	3,890,500	131		13,800

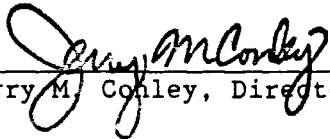
*The cost was figured according to the amount of time and money spent for spawntaking, egg picking, and shipping, etc.


Submitted by:

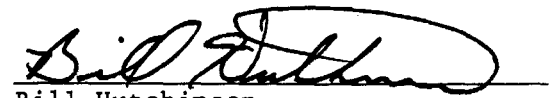
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